

means digitizing said portal image and simulation image to generate digital portal image signals (DPIS) and digital simulation image signals (DSIS), respectively;

processing means comprising coarse alignment means processing said DPIS and said DSIS to generate coarse aligned DPIS and DSIS, means determining from said coarse aligned DPIS and DSIS overlapping regions of said simulation and portal images, and fine alignment means generating matched DPIS and DSIS from said coarse aligned DPIS and DSIS for said overlapping regions of said simulation and portal images; and

output means for generating an output from said matched DPIS and DSIS.

Cancel Claim 2. ✓

Claim 3, line 1, change "2", to -- 1 --. ✓

Claim 7, line 1, change "2", to -- 1 --.

#### REMARKS

The Notice of Allowance was issued on the subject patent application on February 12, 1998. In view of certain prior art which has come to applicant's attention, a Petition to Withdraw the subject application from issue is being filed herewith. These new references are being submitted together with the second supplement information disclosure statement attached hereto.

This Amendment and the Petition to Withdraw are being filed because it is believed that Claim 1 of the subject patent application as filed is not patentable over the *McParland et al.* reference.

Claim 1, as originally filed, calls broadly for apparatus for automatically matching a portal image with a simulation image which comprises means digitizing the portal image and simulation image, means processing the digitized signals to generate matched signals and generating an output from the matched signals.

*McParland et al.* is directed to digital portal image registration by sequential anatomical match point and image correlations for real-time continuous field alignment verification. This technique requires precise initial manual registration of the digital portal image with a reference image indicating the